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REMARKS

Election/Restriction

The Examiner stated:

"The traversal is on the ground(s) that [sic] see the election paper. This is not found persuasive because the fields of search for method and device claims are NOT coextensive and the determinations of patentability of method and device claims are different, that is process limitations and device limitations are given weight differently in determining the patentability [sic] of the claimed inventions. Also, the strategies for doing text searching of the device claims and method claims are different. Thus, separate searches are required.

The requirement is still deemed proper and is therefore made FINAL."

Applicant has elected claims 13-20, but respectfully submits for the record that the Applicant's election in response to the Restriction Requirement was with traverse and without waiving any rights for reconsideration of claims 1-12 or of filing a continuation or divisional application.

Further, it is again respectfully emphasized, as previously pointed out, that the process of making and the product are not believed to be patentably distinct, and that the search and examination of the invention can be performed without "serious burden". Notwithstanding the Examiner's explanation, it is pointed out that it is now established and common practice for Examiners in the United States Patent and Trademark Office ("USPTO") regularly and without objection to perform searches -- in a single application -- on related method and device claims in applications filed in the USPTO under the Patent Cooperation Treaty ("PCT"). This practice is in conformance with the requirements of PCT Rule 13, and because the USPTO is a PCT receiving office, the USPTO is bound by the PCT Rules. The restriction requirement in the present application is not in conformity therewith and therefore cannot be maintained.

For these reasons, it is believed that the Restriction requirement was improper, and withdrawal thereof is again respectfully requested.

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Claim Rejections - 35 USC §§102 and 103

The Examiner's prior rejections, repeated below, have been carefully reconsidered, and clarifications have been made in the Applicant's responding remarks below, with a view to facilitating a clearer understanding of the Applicant's position with respect thereto.

In addition, an explanation is provided below to show that the Examiner has not established a *prima facie* case either of anticipation under 35 USC §102 or of obviousness under 35 USC §103 based on *Ex parte* Skinner, *infra.*, and *In re* Piasecki, *infra.*

Claim Rejections - 35 USC §102

Claims 13-15 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Dennard et al. (U.S. Patent No. 6,812,527, hereinafter "Dennard"). Claims 13-15 were stated as being rejected for the same reason as set forth in the previous Office Action.

Dennard provides a method of forming a silicon-on-insulator ("SOI") metal oxide semiconductor field effect transistor device ("MOSFET") in which an implanted back-gate is formed into a Si-containing layer of an SOI wafer. The implanted back-gate is capable of controlling the threshold voltage of a polysilicon-containing front-gate that is formed over a portion of the implanted back-gate region. The implanted back-gate functions as a dynamic threshold voltage control system in the SOI MOSFET device.

Regarding claim 13, the Applicant respectfully traverses the rejection since the Applicant's claimed combination includes the limitation not disclosed in Dennard of:

"source/drain regions, beneath the silicide layers, that are enriched with dopant from the silicide layers"

The Examiner stated in the Office Action dated March 21, 2005:

"...Dennard discloses ... source/drain regions 50, beneath the silicide layers 56, that are enriched with dopant from the silicide layers ... (col. 3, cols 7-8, and figs. 1, 14, 15)."

However, Dennard, column 7, line 65 – column 8, line 26, states:

"After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain

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regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process..." [deletions for clarity]

Nothing is said about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard does not disclose source/drain regions beneath the silicide layers that are enriched with dopant from the silicide layers as claimed in claim 13.

It is therefore respectfully submitted that the Examiner has not established a *prima facie* case of anticipation for independent claim 13, and that claim 13 and the respective claims 14-18 depending therefrom are accordingly not anticipated by Dennard under 35 USC §102(e) because:

"Anticipation requires the disclosure in a single prior art reference disclosure of each and every element of the claim under consideration." *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983) (citing *Soundsciber Corp. v. United States*, 360 F.2d 954, 960, 148 USPQ 298, 301 (Ct. Cl.), *adopted*, 149 USPQ 640 (Ct. Cl. 1966)), *cert. denied*, 469 U.S. 851 (1984). *Carella v. Starlight Archery*, 804 F.2d 135, 138, 231 USPQ 644, 646 (Fed. Cir.), *modified on reh'g*, 1 USPQ 2d 1209 (Fed. Cir. 1986); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

It is also noted that the Examiner stated, in the Examiner's *Response to Arguments*, concerning claim 13:

"However, silicide layer in Dennard inherently provides dopant to the source/drain regions.

But the Examiner has presented no basis in fact and/or technical reasoning to support such an assertion of inherency. The rejection is therefore improper because:

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (The Board reversed the examiner's rejection because the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).

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The Examiner also stated:

"Applicant failed to provide evidences [sic] to show otherwise."

However, as has been shown above, the Examiner has not established a *prima facie* case of anticipation. The burden is therefore not on the Applicant to provide evidence at this stage, but rather on the Examiner, because:

"It is by now well settled that the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office." *Ex parte Skinner*, 2 USPQ2d 1788, 1788-89 (B.P.A.I. 1986).

"As adapted to *ex parte* procedure, *Graham* [v. John Deere Co.] is interpreted as continuing to place the 'burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103.'" *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785, 788 (Fed. Cir. 1984), quoting *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 177 (C.C.P.A. 1967), *cert. denied*, 389 U.S. 1057 (1968). [underlining for clarity]

Since the Examiner has produced no such factual basis, withdrawal of this objection is respectfully requested.

Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, discussed above, if this rejection is maintained, the Applicant respectfully requests an Examiner Affidavit disclosing the Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002):

"When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons."

For the above reasons, withdrawal of the rejection is therefore respectfully requested.

Regarding claims 14 and 15, these dependent claims each depend from independent claim 13 and are believed to be allowable since they contain all the limitations set forth in independent claim 13 from which they depend and additionally claim non-obvious combinations thereof. Withdrawal of the rejection of claims 14 and 15 is therefore

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respectfully requested, *inter alia*, because of *W.L. Gore & Assocs. v. Garlock, Inc.* and the other cases cited therewith, *supra*.

Claim Rejections - 35 USC §103

Claims 16-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Dennard in view of Sitaram et al. (U.S. Patent No. 5,352,631, hereinafter "Sitaram") and further in view of the remark [sic]. Claims 16-20 were stated as being rejected for the same reason as set forth in the previous Office Action.

Dennard was previously summarized above.

Sitaram provides a process for forming transistor silicided regions. Various silicide and dopant materials are disclosed.

Regarding claim 16, the Applicant respectfully traverses the rejection on the grounds that the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark since the Applicant's claimed combination includes the limitation not disclosed in either Dennard or Sitaram of:

"the source/drain regions that are enriched with dopant from the silicide layers have a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers"

The Examiner stated in the Office Action dated March 21, 2005:

"Regarding to [sic] claim 16, Dennard discloses the claimed invention except for the device wherein the source/drain region are enriched with dopant from the silicide layers having a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the device wherein the source/drain region are [sic] enriched with dopant from the silicide layers having a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers."

However, Dennard, column 7, line 65 – column 8, line 26, states:

"After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and

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annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process..." [deletions for clarity]

Nothing is said or suggested in Dennard about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard neither discloses nor suggests source/drain regions beneath the silicide layers that are enriched with dopant from the silicide layers [and] have a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers as claimed in claim 16.

Thus, the Examiner, in the second paragraph of the remarks quoted above, has apparently acknowledged that Dennard does not teach this combination but has cited no reference showing or even suggesting such a combination. Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, if this basis of rejection is maintained the Applicant respectfully requests an Examiner Affidavit disclosing the Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002):

"When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons."

Accordingly, and based upon the above, it is respectfully submitted that claim 16 is allowable under 35 U.S.C. §103(a) as being unobvious at the time the invention was made to a person having ordinary skill in the art because:

"[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." *In re Vaack*, 947 F2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

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It is also noted that the Examiner stated, in the Examiner's *Response to Arguments*, concerning claim 16:

"However, silicide layer in Dennard inherently provides dopant to the source/drain regions. Applicant failed to provide evidences [sic] to show otherwise."

But the Examiner has presented no factual basis or support for such a bare assertion of inherency, nor established a *prima facie* case, as discussed above. The rejection is therefore improper because of *Ex parte* Levy, *Ex parte* Skinner, and *In re* Piasecki, *supra*, and withdrawal thereof is respectfully requested.

Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, discussed above, if this rejection is maintained, the Applicant respectfully requests an Examiner Affidavit disclosing the Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002).

Additionally, with respect to claim 16, this dependent claim depends from independent claim 13 and is believed to be allowable since it contains all the limitations set forth therein and additionally claims non-obvious combinations thereof. Withdrawal of the rejection of claim 16 is therefore respectfully requested on this ground as well because of *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.* and the other cases cited therewith, *supra*.

Accordingly, withdrawal of the rejection of claim 16 is respectfully requested.

Regarding claim 17, which depends from independent claim 13, the Applicant respectfully traverses the rejection on the grounds that the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark since the Applicant's claimed combination includes the limitation not disclosed in either Dennard or Sitaram of:

"source/drain regions, beneath the silicide layers, that are enriched with dopant from the silicide layers" (parent claim 13)

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The Examiner stated in the Office Action dated March 21, 2005:

"Regarding to [sic] claim 17, Dennard discloses the claimed invention except for the device wherein the dopant is a material selected from a group consisting of arsenic, phosphorus, antimony, boron, indium, and a combination thereof. However, Sitaram teaches the dopant is a material selected from a group consisting of arsenic, phosphorus, antimony, boron, indium, and a combination thereof (col. 6, lines 1-4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the dopant that is a material selected from a group consisting of arsenic, phosphorus, antimony, boron, indium, and a combination thereof, as taught by Sitaram in order to prevent resistive contacts and interconnects that are not desirable for electrical circuits due to the fact that resistance limits maximum current flow, may create heat, and may result in reduced circuit accuracy, consistency, and performance (col. 1, lines 15-19)."

However, Dennard, column 7, line 65 – column 8, line 26, states:

"After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process..." [deletions for clarity]

Nothing is said or suggested in Dennard about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard neither discloses nor suggests source/drain regions beneath the silicide layers that are enriched with dopant from the silicide layers.

Thus, the Examiner, in the second paragraph of the remarks quoted above, has apparently acknowledged that Dennard does not teach this combination but has cited no reference showing or even suggesting such a combination. Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, if this basis of rejection is maintained the Applicant respectfully requests an Examiner Affidavit disclosing the Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002).

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Accordingly, and based upon the above, it is respectfully submitted that claim 17 is allowable under 35 U.S.C. §103(a) as being unobvious at the time the invention was made to a person having ordinary skill in the art because of *In re Vaeck, supra*.

Accordingly, withdrawal of the rejection of claim 17 is respectfully requested.

Additionally, with respect to claim 17, this dependent claim depends from independent claim 13 and is believed to be allowable since it contains all the limitations set forth therein and additionally claims non-obvious combinations thereof. Withdrawal of the rejection of claim 17 is therefore respectfully requested on this ground as well because of *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.* and the other cases cited therewith, *supra*.

Regarding claim 18, which depends from independent claim 13, the Applicant respectfully traverses the rejection on the grounds that the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark since the Applicant's claimed combination includes the limitation not disclosed in either Dennard or Sitaram of:

"source/drain regions, beneath the silicide layers, that are enriched with dopant from the silicide layers" (parent claim 13)

The Examiner stated in the Office Action dated March 21, 2005:

"Regarding to [sic] claim 18, Dennard discloses the claimed invention except for the device wherein the silicide layers are a silicide of a metal selected from a group consisting of cobalt, nickel, titanium, hafnium, platinum, and a combination thereof. However, Sitaram teaches the silicide layers are a silicide of a metal selected from a group consisting of cobalt, nickel, titanium, hafnium, platinum, and a combination thereof (col. 1, lines 26-36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the silicide layers that are a silicide of a metal selected from a group consisting of cobalt, nickel, titanium, hafnium, platinum, and a combination thereof, as taught by Sitaram in order to prevent resistive contacts and interconnects that are not desirable for electrical circuits due to the fact that resistance limits maximum current flow, may create heat, and may result in reduced circuit accuracy, consistency, and performance (col. 1, lines 15-19)."

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However, Dennard, column 7, line 65 – column 8, line 26, states:

“After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process...” [deletions for clarity]

Nothing is said or suggested in Dennard about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard neither discloses nor suggests source/drain regions beneath the silicide layers that are enriched with dopant from the silicide layers.

Thus, the Examiner, in the second paragraph of the remarks quoted above, has apparently acknowledged that Dennard does not teach this combination but has cited no reference showing or even suggesting such a combination. Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, if this basis of rejection is maintained the Applicant respectfully requests an Examiner Affidavit disclosing the Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002).

Accordingly, and based upon the above, it is respectfully submitted that claim 18 is allowable under 35 U.S.C. §103(a) as being unobvious at the time the invention was made to a person having ordinary skill in the art because of *In re Vaeck, supra*.

Accordingly, withdrawal of the rejection of claim 18 is respectfully requested.

Additionally, with respect to claim 18, this dependent claim depends from independent claim 13 and is believed to be allowable since it contains all the limitations set forth therein and additionally claims non-obvious combinations thereof. Withdrawal of the rejection of claim 18 is therefore respectfully requested on this ground as well because of *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.* and the other cases cited therewith, *supra*.

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Regarding claim 19, the Applicant respectfully traverses the rejection on the grounds that the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark since the Applicant's claimed combination includes the limitation not disclosed in either Dennard or Sitaram of:

"source/drain regions, beneath the silicide layers, that are enriched with dopant, from the silicide layers, that has a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers"

The Examiner stated in the Office Action dated March 21, 2005:

"... source/drain regions 50, beneath the silicide layers 56, that are enriched with dopant, from the silicide layers ... (cols 7-8 and figs. 1, 14, 15).

However, Dennard does not disclose the source/drain regions that has [sic] a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers ..." [deletions for clarity]

As previously pointed out above, Dennard, column 7, line 65 – column 8, line 26, states:

"After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process..." [deletions for clarity]

Nothing is said or suggested in Dennard about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard neither discloses nor suggests source/drain regions, beneath the silicide layers, that are enriched with dopant, from the silicide layers, that has a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers as claimed in claim 19.

Thus, the Examiner, in the second paragraph of the remarks quoted above, has apparently acknowledged that Dennard does not teach this combination but has cited no reference showing or even suggesting such a combination. Since there is no disclosure, teaching, or suggestion in Dennard of the claimed limitation, if this basis of rejection is maintained the Applicant respectfully requests an Examiner Affidavit disclosing the

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Examiner's personal knowledge regarding this limitation pursuant to 37 CFR §1.104(d)(2) (2002).

Accordingly, and based upon the above, it is respectfully submitted that claim 19 is allowable under 35 U.S.C. §103(a) as being unobvious at the time the invention was made to a person having ordinary skill in the art because of *In re Vaeck, supra*.

It is also noted that the Examiner stated, in the Examiner's *Response to Arguments*, concerning claim 19:

"However, silicide layer in Dennard inherently provides dopant to the source/drain regions. Applicant failed to provide evidences [sic] to show otherwise."

But the Examiner has presented no factual basis or support for such a bare assertion of inherency, nor established a *prima facie* case, as discussed above. The rejection is therefore improper because of *Ex parte Levy*, *Ex parte Skinner*, and *In re Piasecki, supra*, and withdrawal thereof is respectfully requested.

Accordingly, withdrawal of the rejection of claim 19 is respectfully requested.

Regarding claim 20, which depends from independent claim 19, the Applicant respectfully traverses the rejection on the grounds that the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark since the Applicant's claimed combination includes the limitation not disclosed in either Dennard or Sitaram of:

"source/drain regions, beneath the silicide layers, that are enriched with dopant, from the silicide layers, that has a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers" (parent claim 19)

The Examiner stated in the Office Action dated March 21, 2005:

"Regarding to [sic] claim 20, Dennard discloses the device wherein the silicide layers in the epitaxial silicon thickening layer further comprise silicide layers formed by thermal silicidation of deposited metallic layers into a dopant implanted epitaxial silicon thickening layer (col. 7, lines 1-5)."

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However, Dennard, column 7, line 65 – column 8, line 26, states:

“After spacer formation, source/drain regions 50 are formed into body region 38 abutting each spacer utilizing a conventional ion implantation and annealing process ... Next, ... raised source/drain regions 52 ... are formed ... by depositing a layer of epi polysilicon or Si on the exposed source/drain regions, and doping the thus deposited epi Si or Si layer by ion implanting and annealing. ... Next, ... is [the step of] converting the raised source/drain regions ... into silicide regions 56 by utilizing a conventional salicidation process...” [deletions for clarity]

Nothing is said or suggested in Dennard about the effect, if any, upon the underlying source/drain regions, of the salicidation process on the raised source/drain regions. Thus, although Dennard discloses source/drain regions beneath the silicide layers, Dennard neither discloses nor suggests source/drain regions, beneath the silicide layers, that are enriched with dopant, from the silicide layers, that has a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers (parent claim 19).

These same issues have been discussed in detail above with respect to the rejection of claim 19, and those arguments are equally applicable to the rejection of claim 20. Consequently, the Applicant's claimed combination would not be unpatentable over Dennard in view of Sitaram and further in view of the remark. On those same bases, therefore, the Applicant respectfully traverses the rejection of claim 20.

Accordingly, withdrawal of the rejection of claim 20 is respectfully requested.

Additionally, with respect to claim 20, this dependent claim depends from independent claim 19 and is believed to be allowable since it contains all the limitations set forth therein and additionally claims non-obvious combinations thereof. Withdrawal of the rejection of claim 20 is therefore respectfully requested on this ground as well because of *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.* and the other cases cited therewith, *supra*.

Response to Examiner's Response to Arguments

In response to Applicant's arguments that Dennard does not disclose "source/drain regions beneath the silicide layers that are enriched with dopant from the silicide layers" as

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claimed in claim 13, and "a dopant profile that is steeper than the profile of dopant lacking enrichment from the silicide layers" as claimed in claims 16 and 19, the Examiner stated:

"However, silicide layer in Dennard inherently provides dopant to the source/drain regions."

As explained above, Dennard does not inherently provide dopant to the source/drain regions.

The Examiner also stated:

"Applicant failed to provide evidences [sic] to show otherwise."

However, the Applicant is not required to provide evidence "to show otherwise". The Examiner must first show that a reference provides dopant to the source/drain regions otherwise the Examiner has not established a *prima facie* case. This requirement on the Examiner is clear because:

"It is by now well settled that the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office." *Ex parte Skinner*, 2 USPQ2d 1788, 1788-89 (B.P.A.I. 1986).

"As adapted to *ex parte* procedure, *Graham* [v. John Deere Co.] is interpreted as continuing to place the 'burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103.'" *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785, 788 (Fed. Cir. 1984), quoting *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 177 (C.C.P.A. 1967), *cert. denied*, 389 U.S. 1057 (1968). [underlining for clarity]

Since the Examiner has not produced such a factual basis, withdrawal of this objection is respectfully requested.

The Examiner further stated:

"Feature of an invention not found in the claims can be given no patentable weight in distinguishing the claimed invention over the prior art."

This remark is not understood inasmuch as the features of each and every claim that distinguish from the prior art were specifically and explicitly quoted and discussed both above and in the Response filed on June 21, 2005. Detailed clarification of this statement is requested under *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443, 1447 (Fed. Cir. 1992):

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"The examiner cannot sit mum, leaving the applicant to shoot arrows in the dark hoping to somehow hit a secret objection harbored by the examiner. ...they [Examiners] must state clearly and specifically any objections (the prima facie case) to patentability and give the applicant fair opportunity to meet those objections with evidence and argument. To that extent the concept serves to level the playing field and reduces the likelihood of administrative arbitrariness." [deletion and insertion for clarity]

Conclusion

In view of the above, it is submitted that the claims are in condition for allowance, and reconsideration of the rejections is respectfully requested. Allowance of claims 13-20 at an early date is solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including any extension of time fees, to Deposit Account No. 01-0365 and please credit any excess fees to such deposit account.

Respectfully submitted,



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